Naval War College
Newport, Rhode Island

Joint Logistics Over the Shore Operations
A Doctrinal Perspective

by
Luis A. Pina
Major, U.S. Army

A paper submitted to the Faculty of the Naval War College
in partial satisfaction of the requirements
of the Department of Operations.

The contents of this paper reflect my own personal views
and are not necessarily endorsed by the Naval War College
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JCS Pub 4-03 is the Department of Defense (DOD) doctrine for Joint Logistics Over the Shore (JLOTS) operations. This document has been instrumental in establishing common procedures and a joint lexicon. However, JCS Pub 4-03 contains several doctrinal shortfalls. This paper will focus on lighterage control operations, movement control, JCS Pub 4-03 contains little or no doctrine in these areas. The recommendations contained in this paper will center on the command, control, and communications aspects of these areas. Because JLOTS operations are complex and inefficient, coherent command, control, and communications doctrine will be an operational necessity.

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Abstract of

Joint Logistics Over the Shore Operations

A Doctrinal Perspective

JCS Pub. 4-03 is the Department of Defense (DOD) doctrine for Joint Logistics Over the Shore (JLOTS) operations. This document has been instrumental in establishing common procedures and a joint lexicon. However, JCS Pub. 4-03 contains several doctrinal shortfalls. This paper will focus on lighterage control operations, movement control, and transition from fixed ports to JLOTS operations. JCS Pub. 4-03 contains little or no doctrine in these areas. The recommendations contained in this paper will center on the command, control, and communications aspects of these areas. Because JLOTS operations are complex and inefficient, coherent command, control, and communications doctrine will be an operational necessity.

During the transition from fixed port to JLOTS, the Joint Force commander must designate the Naval and Army forces. The JLOTS commander must then develop an operations plan which synchronizes the use of Army and Naval units. With regard to lighterage control operations, JCS exercises lessons learned tend to support the beach lanes method as the preferred method for controlling watercraft. Integration of a Movement Control Activity into a JLOTS operation will ensure timely onward transportation of supplies into the theatre of operations. Current doctrine provides cursory guidance about the movement of containers. The recommendations in this paper will cover guidance about the transportation of break fuel, unit equipment, water, and bulk fuel.

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Chapter I

Introduction

Across the spectrum of conflict, ninety-five percent of materiel inbound to the theatre of operations will be by sealift. The Joint Force commander will depend on the host nation to provide ports and transportation services to support theatre requirements. However, there will be situations in which the ports are destroyed or substandard. The Joint Force commander will then direct the establishment of a Joint Logistics Over the Shore Operation (JLOTS) in order to sustain theatre requirements.

What is LOTS?

> LOTS is the loading and unloading of ships without the benefit of fixed port facilities in either friendly or undefended territory and, in time of war, during phases of theatre development. LOTS operations are conducted over unimproved shorelines, through fixed ports not accessible to deep draft shipping and through fixed ports that are inadequate without using LOTS capabilities.(1)

JLOTS operations are LOTS operations conducted jointly by two or more service component forces of a unified commander.(2)

A JLOTS operations starts after an amphibious assault. During the transition from an amphibious assault to a JLOTS operation,

Naval and Army Commanders will arrange for transfer of command responsibility to the JLOTS commander. The entire transition from an amphibious assault to JLOTS takes about four days.(3) JLOTS II, a Joint Chiefs of Staff (JCS) directed exercise conducted at Fort Story, Virginia in June 1983, tested this transition process. During the transition, the JLOTS commander's major concerns are security of his forces and commencement of cargo discharge operations efficiently to preclude any degradation in throughput of cargo. The JLOTS commander's major tasks are to establish security, and to install a cargo discharge system (e.g. calm water discharge facility, causeway systems).

The JLOTS commander establishes a tactical operations center, and a lighterage control center to maintain command, control, and communications. A myriad of diverse units from the Army and Navy participate in JLOTS a operations. A Transportation Terminal Service Company is capable of discharging one vessel in a twenty-four hour period. In addition, a Transportation Terminal Service Company is responsible for discharging cargo at the beach and to provide limited transportation to the marshalling area. To transport cargo from ship to shore, the JLOTS commander has lighterage units that possess Landing Craft Utility (LCU), Landing Craft Mechanized (LCM), Lighter Air Cushion Vehicles (LACV), Logistics Support Vessel, and Powered Causeway Sections.(4) A JLOTS commander also has an organic engineer port construction company to assist in beach preparation, and in the installation of cargo discharge platforms. Automated Cargo Documentation detachments provide the JLOTS commander intransit visibility of cargo from the ship to the marshalling yard. Reverse Osmosis Water Purification

Units provide the theatre with capabilities for water production. Naval amphibious construction battalion personnel operate the off shore petroleum discharge system and assure connectivity with the inland petroleum discharge system. Navy Cargo Handling and Port Group are capable of loading and discharging all classes of cargo.(5)

The JLOTS commander faces a diversity of complex tasks throughout the transition from an amphibious operation to a JLOTS operation. During planning and execution, the JLOTS Commander must consider airland battle tenets and sustainment imperatives in order to establish and maintain a successful JLOTS operation. The commander must synchronize his efforts to maintain continuity of operations. Proper integration of a myriad of Army and Naval units will add depth to the JLOTS support structure and ensures a throughput capacity that supports the Joint Force commander's priorities. The JLOTS commander maintains the initiative by understanding his units capabilities and by being able to improvise whenever operational shortfalls exist. Anticipation and responsiveness to the Joint Force commander's support requirements make the JLOTS operation agile. To effect a successful JLOTS in accordance with Airland Battle tenets and sustainment imperatives, the JLOTS commander must rely on an effective command, control and communications structure.(6)

The following characteristics or criteria measure the effectiveness of a reliable JLOTS operation:

*JLOTS operations are characterized by sustained, high-tonnage movements from ship to shore. Each link

in the system must be able to maintain the flow of cargo.

*Sustainability and reliability are more important than a surge capability.

*JLOTS operations are conducted in austere environments. Only limited shore facilities will be available to maintain watercraft and related equipment.

*JLOTS equipment must operate moderately in rough seas. Subsystems that operate only in calm seas and ideal weather limit the entire discharge of all to that lowest common denominator.

*Deployability of equipment required to run a JLOTS operation is critical.(7)

JLOTS operations are inefficient by nature. The design of Modified Table of Organization (MTOE) units account for a fifty percent degradation in capability from fixed port to JLOTS. For example, a Transportation Terminal Service Company is capable of discharging 400 containers daily in fixed port but only 200 containers in a JLOTS operation.(8) Environmental factors such as sea states, tidal variations, weather, and beach gradients have an impact on the effectiveness of a JLOTS operation.

JCS Pub. 4-03 is the joint doctrine for the organization and conduct of Joint Logistics-Over-the-Shore operations. The document has been instrumental in establishing common procedures and a joint lexicon. However, JCS Pub. 4-03 contains several doctrinal shortfalls. The focus of this paper will be to identify areas that affect command, control, and communications for which there is little

or no doctrine in JCS Pub. 4-03 and to make recommendations to improve current doctrine. Specifically, the paper will focus on recommendations to doctrine about the transition from fixed ports to JLOTS, movement control in JLOTS, and lighterage control operations. To simplify understanding, each chapter will include recommendations to doctrine pertaining to the topical areas identified.

Chapter II

JLOTS Scenarios

Joint Doctrine. According to JCS Pub. 4-03, the Joint Force commander will direct JLOTS operations when ports are substandard or destroyed. The JLOTS commander and the Naval Component commander will recommend landing sites and the Joint Force commander will make the final approval.

JLOTS operations are conducted after the assault echelon and the assault follow-on echelon of an amphibious operation. The JLOTS commander assumes the responsibility for JLOTS upon mutual agreement between the Navy Officer in Tactical Command and the designated JLOTS commander, or when directed by the Joint Force commander. Whether the JLOTS commander is from the Navy or Army Component, Naval offload personnel and equipment are under operational control of the JLOTS commander and assimilated into appropriate task organizations. Administrative control remains with the Naval Component commander. (1) Appendix I is a table that shows the command and control relationship during a JLOTS transition.

There is no doctrine in JCS Pub. 4-03 that addresses the transition from fixed ports to JLOTS operations. This chapter will prescribe recommendations that may enhance the JLOTS commander's command, control and communications during the transition from fixed ports to JLOTS.

Fixed port operations to JLOTS.

A likely threat in war is that ports will be destroyed or captured by enemy forces. A key object of Soviet doctrine is to

disrupt the enemy's lines of communication. Destruction of ports can severely degrade throughput capacity of cargo in a high intensity conflict. The JLOTS commander faces unique problems in the transition from a fixed port to a JLOTS operation. His objective throughout the transition is to ensure a continuous flow of materiel to the theatre of operations while ensuring security of his forces.

Since most of all cargo transported to the theatre will be by sealift, the effectiveness of this transition will be critical for the Joint Force commander.

In an amphibious operation, most of the Naval and Army assets are within proximity of JLOTS area of operation. In a fixed port operation, units may be far away from the JLOTS area of operation. In addition, Army and Naval units may be dispersed throughout the theatre of operations. Thus, it will be incumbent upon the JLOTS commander to identify these units and their locations in order to start planning for this transition. In a port operation, command and control of Army and Naval units will fall under the command of their respective service. The Joint Force commander must decide which Army and Naval units will support a JLOTS operation.

Recommendations

The Joint Force commander must designate the JLOTS commander and the Army and Navy units that will fall under his operational command. During the conduct of fixed port operations, the JLOTS commander must develop an operations plan to synchronize the use of these units in the JLOTS area of operation.

The JLOTS commander must develop communications procedures for the transition from a fixed port to a JLOTS operation. An assessment of interoperability of communications equipment is imperative. The JLOTS commander will take every action to minimize communications force structure shortfalls before the transition to JLOTS operations.

The JLOTS commander must evaluate potential JLOTS sites and coordinate with the Movement Control Activity the impact of the proposed JLOTS location on theatre transportation requirements. Jointly, the JLOTS commander must evaluate the capability of theatre transportation assets and host nation transportation in sustaining combat operations from the proposed JLOTS locations.

The JLOTS commander must plan for the movement of his units from the fixed port to the JLOTS area of operation. This will be the most difficult portion of the transition. Unit equipment will move to the JLOTS location by both land and sea, which can pose command, control and communications problems. Transportation Terminal Service units do not have the capability for self transport. Most of the Terminal Service units equipment may move via lighterage to the JLOTS area of operation. During the planning process, the JLOTS commander and the Movement Control Activity must assess the capability of organic self-transport to the JLOTS area of operation. The JLOTS commander will identify transportation shortfalls and the Movement Control Activity will arrange for external transportation support.

During the transition, the JLOTS commander and the Military Sealift Command representative must arrange for a method of communications to divert MSC controlled vessels to the JLOTS area of operations. Also, Military Sealift Command must provide merchant

shipping with information about the location of anchorage points in the JLOTS area of operations.

The JLOTS commander must implement a lighterage control plan that identifies safe havens in route to the JLOTS area of operation. The threat condition will determine the level of naval and air security needed during the movement.

The JLOTS commander must assess battle damage of equipment and cargo, determine casualties, and evaluate the impact of losses on the JLOTS operation. Adequate host nation support may minimize any degradation in capabilities resulting from battle damage to equipment.

Notwithstanding any disruptions, JLOTS operations are slow and difficult to start. JCS exercise must build into scenario objectives that require a transition from fixed port to JLOTS operations. Only training improves effectiveness and provides useful input for further training, doctrine, and changes in force structure.

Chapter III

Lighterage Control Operations

Lighterage Control Doctrine. JCS Pub. 4-03 provides guidance about lighterage control operations. This chapter will address the beach lanes and the queuing patterns for controlling watercraft. In addition, there will be discussions about the manning of lighterage control points (LCP) based on lessons learned from JCS exercises. This chapter will provide recommmendations about the composition of LCPs.

The JLOTS commander establishes a Lighterage Control Center (LCC) to allocate and manage the use lighterage in a LOTS operations. The LCC has a location ashore that provides the best visibility of operations without interfering with shoreline transfer points. Lighterage Control Points (LCPs) are established by the appropriate transportation company on each ship being discharged and on the beach. Ship LCP (SLCP) are normally collocated with the ship board control points but may be positioned anywhere aboard to maximize lighterage control at multiple discharge points. Beach LCP (BLCP) are located wherever necessary on the beach to control lighterage waiting to come ashore or departing the beach en route to a cargo ship offshore.(1)

The LCC establishes traffic patterns for lighterage to avoid collisions and allow for an unhampered flow of traffic. The two primary elements of the traffic patterns are beach lanes and queuing circles. Appendix II is a notional JLOTS area of operation which depicts beach lanes and queuing circles. Queuing circles are holding

patterns used by lighterage waiting alongside the discharging vessel. Beach lanes are lanes that lead to transfer points on the beach. In short, the LCCs and LCPs are an extension of the JLOTS Commander's command, control and communications structure. LCC is a sub-element of the Tactical Operations Center.(2)

JCS exercises. Lessons learned from JCS exercises support the beach lane traffic pattern and the elimination of queuing traffic patterns as a viable lighterage control method. The single most important drawback in establishing a queuing pattern is the oversaturation of communication nets. For instance, one can expect between twenty-five and fifty watercraft in a JLOTS operation. For safety reasons, only communications net is used while watercraft are in the queue. Oversaturation of communications nets was a major lesson learned in LOGEX 88 and Solid Shield 89. The JLOTS commander for Solid Shield 89 recommended separate radio circuits ship side, shore side, and for administrative purposes.(3) Congestion of the communications net results when JLCC and several SLCPs and BLCPs are providing direction to a variety of lighters simultaneously. This often results in confusion and operations become unmanageable. In a period in which radio silence is implemented to enhance communications' security, queuing patterns become ineffective. During radio silence, use of arm and hand signals can be ineffective due to poor visibility. Doctrinally, the queuing pattern has merit. In essence, the queue is a consolidation of watercraft from which LCPs could obtain lighterage support. Queues have a potential for flexibility and responsiveness. Unfortunately, the communications problems experienced in JCS exercises detract from these potential benefits.

In the beach lane method, communications nets exist for each lane between an SLCP and BLCP. The need for communication is minimal in the beach lane method. The LCC makes initial lighterage assignments. Because lighterage are in direct support of predesignated LCPs, beach lanes can be less flexible if not properly managed by the LCC. The LCC must continuously evaluate the use of watercraft in the beach lanes and reassign watercraft to better support the JLOTS operation.

Current doctrine does not specify the composition of LCC, SLCP, or BLCP. In JLOTS II, a major lesson learned was the inadequate staffing of the LCC and LCPs. The composition of the BLCP must consist of experts in lighterage operations and terminal service operations. The efficiency of the ship offload operations will be strictly dependent on the SLCPs ability to make lighterage available continuously. Common problems encountered in JCS sponsored exercises in JLOTS were the following:

1. SLCP did not provide the lighterage sufficient notification to move along side a vessel.(4)

2. SLCP have over-abundance of lighterage waiting along the ship when the ship discharge operations were too slow.

3. Lighterage control points on the ship were comprised of inexperienced personnel.(5)

Recommendations

Eliminate queuing traffic patterns as a lighterage control method. Beach lanes offer the JLOTS commander better command and control of lighterage. Lighterage would travel from one SLCP to one BLCP. The circuitious movement of watercraft under the beach lane method would eliminate most of the communications normally experienced in a queuing pattern. The JLCC should establish separate communication nets for LCPs, emergencies, and watercraft leaving the area of operation.

The LCC will make initial lighterage assignments to beach lanes and try to maintain unit integrity whenever possible. LCC will routinely evaluate utilization of lighterage and reallocate assets to optimize ship discharges.

Composition LCC and LCPs. JLCC must be capable of monitoring every LCP communications net, and provide the technical and tactical direction to the SLCP. SLCPs should have one officer in charge with an expert in ship discharge systems and an expert in watercraft assigned to the beach lane.

A mutual understanding of terminal service and watercraft unit capabilities and limitations will be instrumental in assuring continuous ship discharge operations. Beach lighterage control points should have an officer in charge, an expert from the Terminal Service Unit and an expert from the watercraft unit assigned to support the beach lane. This BLCP composition will be instrumental in speedy beach clearance and onward transportation of cargo. In the SLCP, the key to continuous operations is a clear understanding of

average ship discharge cycle times and average transit time of lighterage on the beach lanes. The ship discharge cycle time is the period in time that a ship crane operator can offload a piece of cargo (i.e. container and breakbulk) from the ship to a lighter. The transit time is the period in time that lighters can travel between LCPs. In a ship the size of a Fast Sealift Ship, it is conceivable to have simuiltaneous lift on/lift off operations and roll-on/roll-off operations. Cycle times and transit times will vary depending on environmental factors such as sea states, visibility, tidal variations and weather.

Chapter IV

Movement Control

The JCS Pub. 4-03 does not cover doctrine about movement control. A shortcoming in JCS exercises is that scenarios do not integrate Movement Control Activity into a JLOTS operation. In essence, the JLOTS commander functions as the Movement Control Activity. Doctrinally, the JLOTS commander does not have the authority or capability to arrange for onward transportation of material to the theatre of operations. A key element of a successful JLOTS operation is the ability of the theatre Movement Control Activity to arrange responsive onward transportation of cargo throughout the theatre. This chapter will cover some of the transportation requirements in JLOTS and will recommend responsibilities of the Movement Control Activity and the JLOTS commander.

What is Movement Control?

Movement Control is the planning, routing, scheduling, control, coordination, and in-transit visibility of personnel, units' equipment, and supplies moving over lines of communication and the commitment of allocated transportation assets according to command planning directives. It is a continuum that involves synchronizing and integrating logistics, movement information, and programs that span the strategic, operational, and tactical levels of war.

Movement Control is a system that balances requirements against capabilities and allocates resources based on the combat commander's priorities. FM 55-10, Movement Control in a Theatre of Operations, is the doctrine that provides joint and Army movement control procedures.(1) The doctrine contained in this document about JLOTS operations is only limited to containers.

An important ingredient in movement control is to receive a cargo manifest. In a port scenario, the theatre gains visibility of inbound cargo through ocean cargo manifest, which is received by the Military Traffic Management Command area command responsible for the vessel.(2) There is no doctrine as to who will receive the cargo manifest in a JLOTS scenario. The Joint Movement Center (JMC), an organization at theatre level, is responsible to interface with the Joint Deployment System (JDS) to monitor and change the deployment of forces and supplies.(3) In accomplishing its mission, the JMC can coordinate to divert strategic sealift and airlift assets. JMC is the interface between strategic and operational level movement control, and accordingly, should be responsible for receiving the cargo manifest from the Military Sealift Command (MSC).

The JLOTS commander has a responsibility to establish intransit visibility of cargo once MSC offers a ship for offloading. The aim of intransit visibility is to provide real-time information about location of various types of cargo transitting the JLOTS area of operation. Intransit visibility of cargo also allows the JLOTS commander to measure his throughput capability. Automated cargo detachments have the capability to document cargo movements throughout the area of operations (e.g. ship, beach area, and marshalling yard). The JLOTS commander offers cargo for onward movement at the marshalling yard.

The types of cargo transitting the JLOTS area of operation require close coordination between Movement Control Activity and JLOTS commander. Categories of cargo are:

containers

breakbulk

unit equipment

liquid:

water

fuel

retrograde

Integrating Movement Control Activity into a JLOTS operation does not dismiss the JLOTS commander from movement control altogether.

Recommendations

The importance of JLOTS makes it imperative to closely monitor capabilities and requirements. Prudent use of transportation assets to arrange for responsive onward transportation of cargo requires careful planning and execution. The Movement Control Activity must be the interface that communicates the Joint Force Commanders transportation priorities to the JLOTS commander. In this capacity, the theatre Movement Control Activity monitors strategic sealift inbound to the theatre to include any diversions in sealift. Following are the considerations that may contribute to an effective integration of movement control:

JLOTS site assessment:

In the planning process, the JLOTS commander and the Movement Control Activity will jointly evaluate potential JLOTS sites. JLOTS commander will consider factors of METT (mission, enemy, terrain, troops and time available) in making his assessment.

The Movement Control Activity will evaluate theatre transportation assets and host nation transportation. This evaluation will identify the transportation shortfall and the impact on logistics.

Unit equipment: The JLOTS commander transports unit equipment from the ship to the shore. The JLOTS commander provides the Movement Control Activity with intransit visibility through automated cargo documentation reports that provide accounting of equipment by unit and location. Timely coordination is necessary to ensure that the Movement Control Activity arranges for the transportation of equipment operators to the JLOTS area of operation. Movement Control Activity arranges for scheduling of convoys and security from the JLOTS to the theatre of operation.

Cargo Documentation: Cargo Documentation Detachments provide intransit visibility of cargo in the JLOTS area of operation. Intransit visibility gives the JLOTS commander a measure of effectiveness and provides the Movement Control Activity with real-time data to effect responsive onward transportation of cargo.(4)

Water: Movement Control Agencies must coordinate for onward transport of water produced from the Reverse Osmosis Water Purification Unit (ROWPU). A ROWPU barge can support the theatre of

operations with 300,000 gallons of water per day. To transport this quantity of water, Movement Control Activity must have at its disposal about sixty each 5,000 gallon tankers.(5)

Synchronization of motor truck assets to meet achieve this capability will require close cooperation between JLOTS Commander and Movement Control Agency.

Bulk Fuel:

The Movement Control Agency in JLOTS must coordinate for the transportation of bulk fuels. The Offshore Petroleum Discharge System was designed to provide an armed services expeditionary force in the objective area with cargo volumes of fuel products ashore over a sustained period of time. This Navy system will deliver fuel products for all purposes to the high water mark. In layman's terms, the OPDS uses a four-mile conduit to pump fuel from a ship anchored at sea to a beach head. On land, an Army Petroleum Pipeline and Terminal Operating Company uses the inland petroleum discharge system to discharge fuel into two tank farms, each with a capacity ranging from 50,000 to 250,000 barrels.(6) The Movement Control Activity will be responsible for transporting theater requirements. The JLOTS commander will jointly determine if current OPDS capabilities satisfy theatre requirements. The JLOTS commander must advise the Joint Force commander of capability shortfalls and the impact on sustaining theatre operations. In assessing capabilities, the JLOTS commander must consider environmental factors such as sea states and weather because these have a degradating effect on throughput of bulk fuel.

Retrograde Cargo: Damaged equipment retrograding to a JLOTS location requires coordination for special handling by the Movement

Control Activity. Military Sealift Command in coordination with the Movement Control Activity must designate a vessel(s) for retrograde cargo.

Based on the transportation priorities established by the Joint Force commander, the JLOTS commander and Movement Control Activity will jointly assess capabilities to develop a cargo discharge/retrograde plan that will optimize theater support requirements. The Movement Control Activity will arrange materiel handling equipment and transportation clearances for retrograde equipment moving from the theatre of operations to the JLOTS area of operations. The JLOTS commander must manage to reallocate assets to transport both retrograde and inbound cargo. In addition, the JLOTS commander must establish cargo traffic routes throughout the JLOTS area of operations that will ensure the efficient and simultaneous movement of retrograde and inbound cargo.

Movement Control is a shared responsibility between the Movement Control Activity and the JLOTS commander. Intense coordination and proper use of transportation assets will ensure movement control. In the theatre of operations, requirements will always exceed capabilities. Therefore, prudent use of the limited transportation assets will be a key fulfilling the Joint Force commander theatre support requirements.

Chapter V

Conclusions

JCS publication 4-03 has been instrumental in providing a coherent modus operandi for the services to use in Joint Logistics Over the Shore Operations. Command, control and communications in JLOTS is critical since ninety-five percent of all cargo inbound to a theatre of operation will be by sealift.

JCS exercises must test scenarios other than the classical doctrinal scenario of a JLOTS after an amphibious assault. Currently, in Saudi Arabia Army and Naval units are operating in fixed ports. These ports are sophisticated and are capable of handling U.S. requirements. If ports are damaged or destroyed, the Joint Force commander will face a JLOTS requirement. The JLOTS commander's challenge will be to make a smooth, speedy transition and ensure a constant flow of materiel in the theatre to sustain combat operations.

Experiences from JCS exercises reveal a myriad of problems in the conduct of Joint Lighterage Control Center operations as an extension of the JLOTS commander's command, control and communications organization. Joint Lighterage Control Operations synchronize the use of a variety of lighterage to enhance efficient ship discharge operations. The key doctrinal aspects are the use of beach lanes as the preferred method for use of lighterage operation and to specify the composition of LCPs. The key to the composition of lighterage control points is to have experts that know the capabilities and limitations of the ship discharge systems and lighterage in a JLOTS operations.

Integration of Movement Control Operations in JLOTS operation will ensure a continuity of cargo movement from JLOTS commander to the theatre of operations. JLOTS doctrine does not address movement control and Army doctrine only gives cursory guidance about the movement of containers into the theatre of operations. However, the variety of cargo inbound to the theatre may require special transportation and materiel handling equipment. The JLOTS commander can expect to discharge a vast array of cargo which includes containers, break bulk, unit equipment, refrigerated cargo, ammunition and liquid cargo. In addition, the JLOTS commander may be required to handle retrograde cargo. Retrograde cargo can be damaged equipment or equipment requiring higher echelons of maintenance. Movement Control Operation must coordinate for special movement and handling from the theatre of operation to the JLOTS commander.

JCS exercises must integrate a Movement Control Activity to perform movement control function. In layman's terms, a JLOTS commander must be an expert in discharge operations and the Movement Control Activity must arrange for common user transportation for onward movement to the theatre. Movement Control Activity must be familiar with the intricacies of JLOTS operations in order to achieve the Joint Force Commander's priorities.

The complexity and relative inefficiency of a JLOTS operation poses a challenge for the JLOTS commander. These challenges can have an adverse impact on his mission. The development of doctrine in the areas of lighterage control operations, movement control, and JLOTS scenarios will be critical in ensuring that the JLOTS commander fulfills theater support requirements.

NOTES

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Appendix I

Transitions, Functions and Controls

for

JLOTS Operations

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Function	PHIBOP	Navy LOTS	JLOTS	
			Navy Control	Army Component Control
Commander	CATF	OTC	OTC	As Assigned
In Charge Offload	Assault Group Commander	Offload Coordinator	Offload Coordinator	Terminal Commander
Control Organization	Primary Control Officer (PCO)	OCO	OCO	LCC/Operations (OPS)
Ship	Commanding Officer (CO)	Debark Off/Ship's Platoon	Debark Off/Ship's Platoon	Ship's Platoon Leader
Lighterage Control (at ship)	Combat Information Center (CIC)	LCO	LCO	SLCP
Beach	Beach Party Team (BPT)	BPT	BPT	BLCP

Note: The organization aboard ship will not change during an offload.

Appendix II

JLOTS Operations

in a Bare Beach

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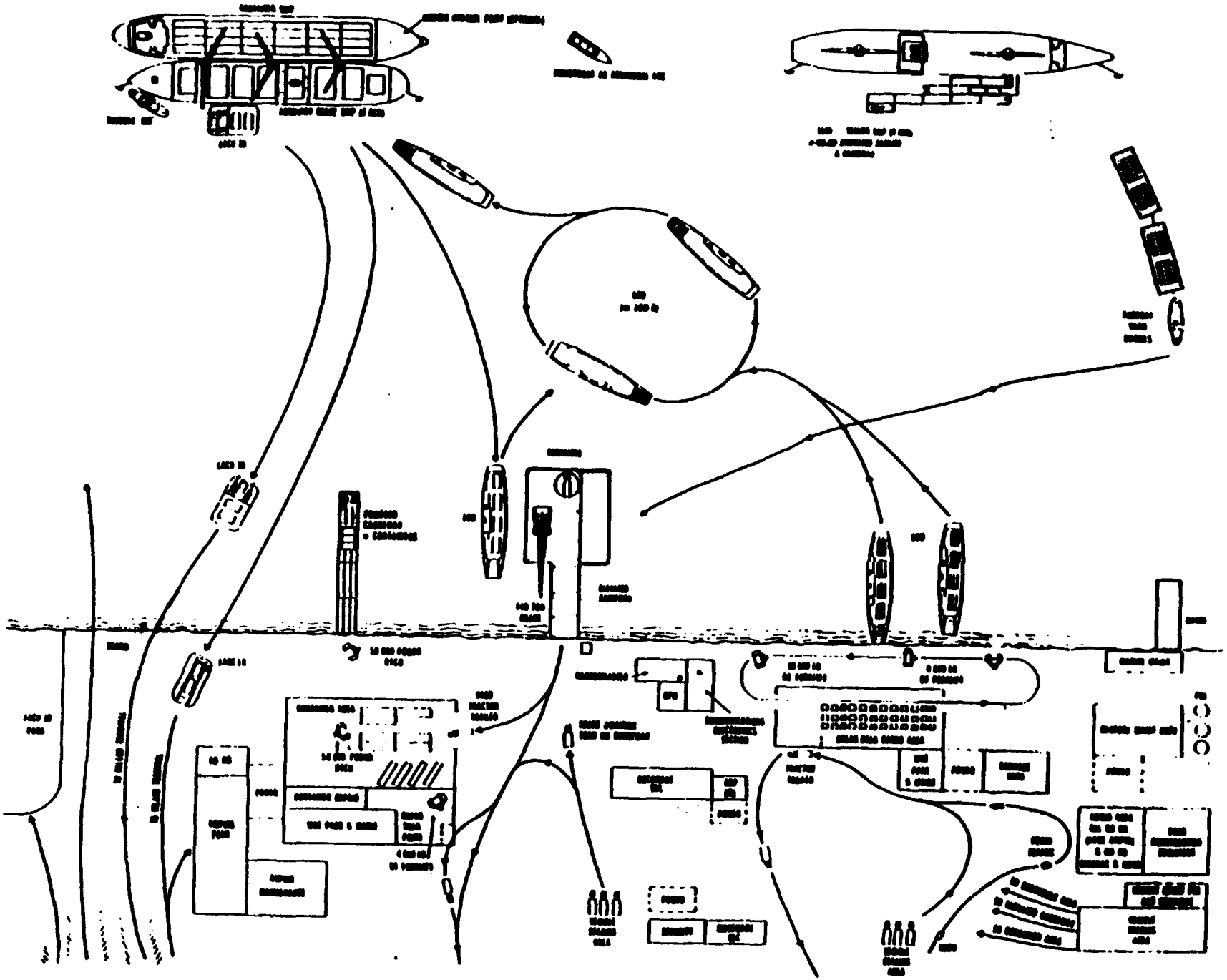

Figure IX-2. LOTS Operation Area (Bare Beach)